

## THREE NEW APHIDS FROM UTAH\*

BY GEORGE F. KNOWLTON  
*Agricultural Experiment Station*  
*Logan, Utah*

**Macrosiphum packi**<sup>1</sup> Knowlton, n. sp.

This large, rather shiny, bluish green to apple-green aphid<sup>2</sup> is quite generally distributed over Utah, feeding upon the common rabbit brush (*Chrysothamnus nauseosus*). The colonies are usually small and located on the leaves well out toward the tips of the twigs. Most forms collected have been apterous viviparous females and nymphs, though one pupal nymph has been taken.

*Stem mother.* Similar to the summer apterous females but darker green and often larger, reaching a length of 3.6 mm. in some cases.

*Apterous viviparous female.* Size, 3 to 3.25 mm. long; rostrum reaching second coxa; head armed with elongate hairs, enlarged at the tip; ocular tubercles rudimentary or lacking; antennal tubercles rather prominent and diverging; antennal I gibbus on inner surface; antennæ black except I, II, and base of III which are green; body armed with numerous capitate to fan-like hairs; antennal III, 0.80 mm. long and armed with three to nine oval sensoria arranged in an irregular to scattered row on basal one-half to two-thirds of segment: IV, 0.8 mm.; V, 0.65 to 0.67 mm.; VI, 1.24 to 1.54 (0.14 + 1.1 to 1.4) mm.; legs rather long; lateral tubercles lacking; cornicles slender, 1.17 mm. long, without closed reticulations, usually curving slightly outward near distal end, moderately swollen before the flange which is not preceded by a constriction; cauda elongate, with four or five hairs on each side and two on dorsal surface near end.

First collected at Cove Fort, Utah, on July 7, 1925. Other collections were made at Aurora, Axtell, Fruita, Lehi, Loa, Milford, Richfield, Salina (May 7), Scipio, Sigurd, St. John, Teasdale, Tooele, and Torry, Utah.

The cotypes may be found in the collections of the United States National Museum, Utah Agricultural Experiment Station, and in the collection of the writer.

**Aphis sorenseni**<sup>3</sup> Knowlton, n. sp.

The winged form of this greenish black aphid<sup>4</sup> was collected

\* Approved for publication by Director, June 23, 1927.

<sup>1</sup> Dr. H. J. Pack, Entomologist, Utah Agricultural Experiment Station.

<sup>2</sup> The writer wishes to thank Dr. C. P. Gillette and Miss M. A. Palmer for their opinions concerning this form.

<sup>3</sup> C. J. Sorenson, Assistant Entomologist Utah Agricultural Experiment Station.

<sup>4</sup> The writer wishes to thank Dr. E. M. Patch for her opinion concerning this form.

at Providence, Utah, July 18, 1925, where it was feeding upon the leaves of willow (*Salix lutea*).

*Winged viviparous female.* Size, 1.55 mm. long; rostrum barely reaching second coxæ; antennæ black and armed with pointed hairs; antennal III, 0.36 mm. long with twenty-five to thirty oval sensoria scattered over the segment; IV, 0.23 mm.; V, 0.2 mm.; VI, 0.46 (0.11 + 0.35) mm.; prothoracic tubercles prominent; legs of moderate length; wing venation typical, veins slightly dusky, second branch of M arising slightly nearer to margin of wing than to the first branch; abdomen bluish green with a prominent lateral tubercle on each side posterior to the cornicles; cornicles black, 0.25 mm. long, cylindrical, covered with broken reticulations and ending in a moderate flange; cauda black, constricted near base with four to five hairs on each side and one on dorsal surface near distal end.

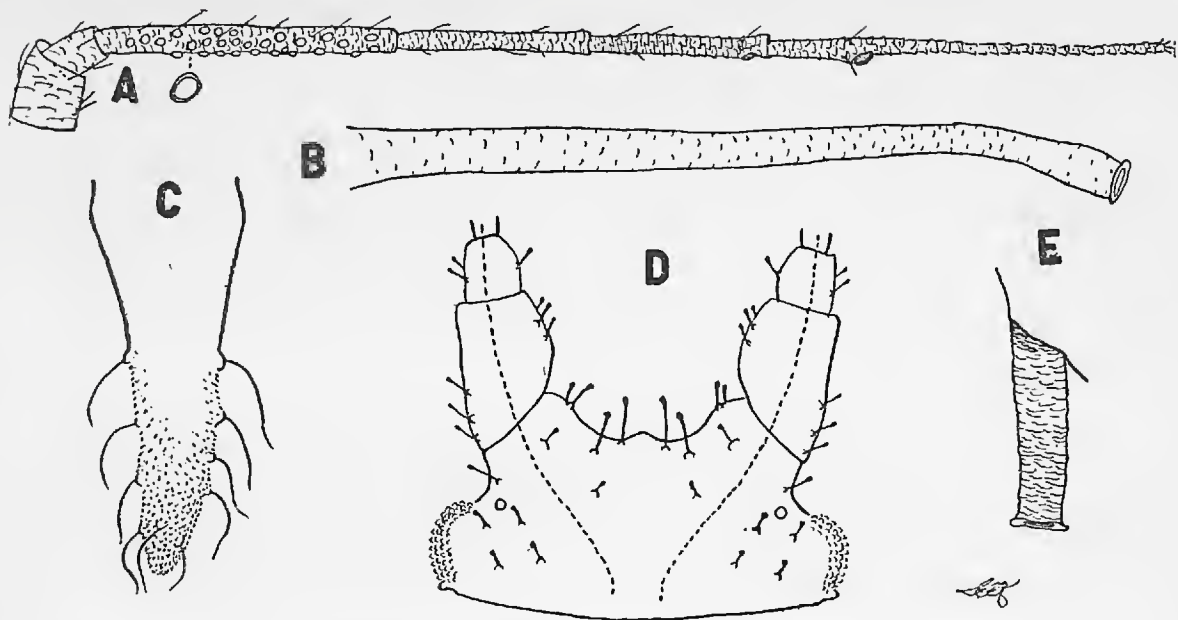
Type in the collection of the writer.

### *Neomyzus masoni* Knowlton, n. sp.

This bluish green aphid was rather common on young sunflowers (*Helianthus annuus*) at St. George, Utah, on July 9, 1925. The aphids were present on the younger leaves and tip growth, in some cases in such numbers as to cause wilting. Many were also present on the underside of older leaves. Migration was occurring at this time, and winged forms were found on many other plants. These forms would take flight on very slight disturbance.

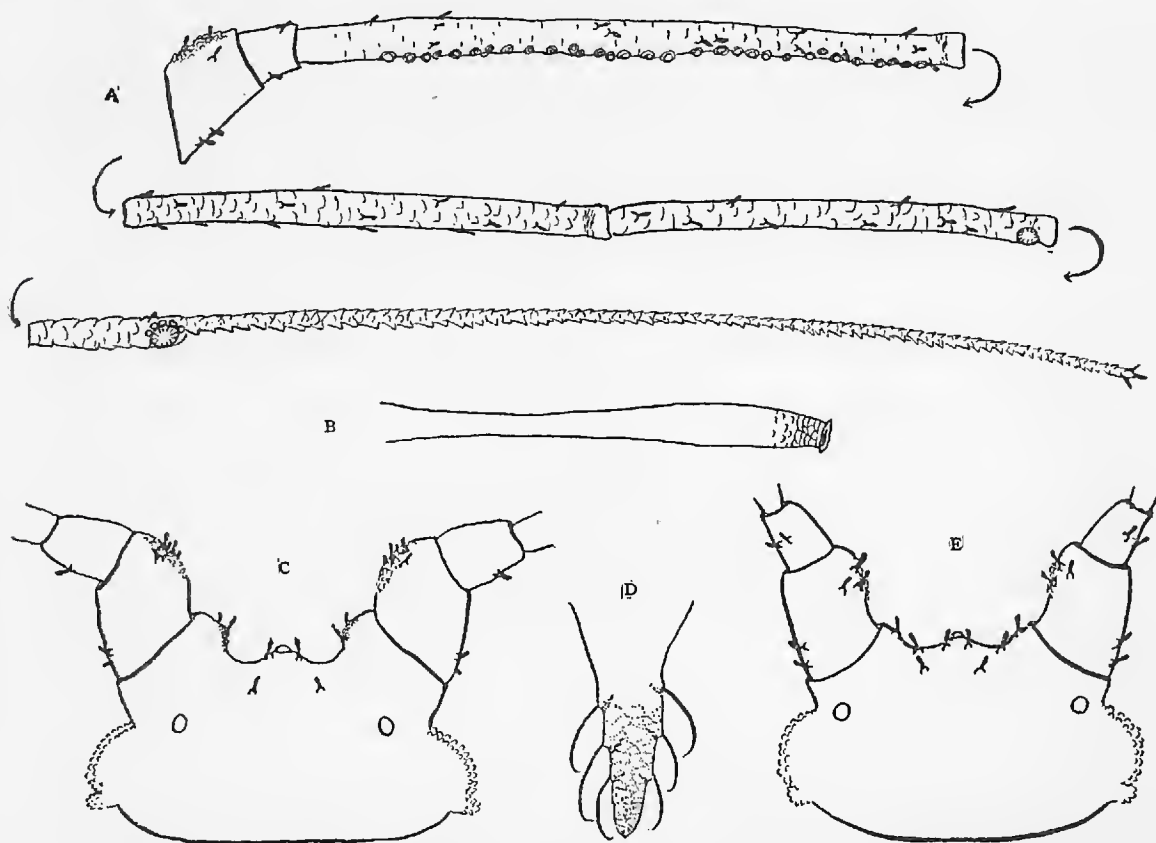
Dr. P. W. Mason called the writer's attention to the resemblance of this form to *Amphorophora corylina* (Davidson) from which it differs principally in having more slender, elongate cornicles, and the *Mysini* character of slightly gibbus inner surface of the first antennals which extends to the inner surface of the antennal tubercles of the apterous forms.

*Alate vivipara.* Color bluish green to yellowish green; size, 2 mm. long; rostrum reaching second coxa, blackish at tip; head and antennæ armed with short finger-like hairs often enlarged toward tip; antennal tubercles prominent; antennal segments I, II, and base of III greenish, rest blackish to black; antennal I slightly gibbus on inner side; III, 0.71 to 0.78 mm. long with twenty-five to thirty sensoria in irregular row; IV, 0.51 to 0.56 mm.; V, 0.55 to 0.57 mm.; VI, 1.42 (0.17 + 1.25) mm.; legs rather long; wing venation typical with brownish black veins and second branch of media arising slightly nearer margin of wing than to first branch of media, and with a long narrow stigma; cornicles 0.70 to 0.75 mm. long, attachment greenish black, blacker at tip where there are a few rows of



Explanation of Figure 1

A, *Aphis sorenseni* n. sp., antenna of alate viviparous; B, *Macrosiphum packi* n. sp., cornicle of apterous viviparous; C, *M. packi* cauda of apterous viviparous; D, *M. packi*, head of apterous viviparous; E, *A. sorenseni*, cornicle of alate viviparous.



Explanation of Figure 2

*Neomyzus masoni* n. sp. A, antenna of alate viviparous; B, cornicle of alate viviparous; C, head of apterous viviparous; D, cauda of alate viviparous; E, head of alate viviparous.

closed reticulations before the flange; cauda elongate, cone-shaped, constriction near base very slight to lacking.

*Apterous vivipara*. Color bluish green to pale green; body 2.12 mm. long; antennal tubercles and first antennal slightly gibbus on inner surface; antennæ blackish to black; antennal III, 0.8 mm. long with five to eight sensoria in a row on basal half; IV, 0.55 mm.; V, 0.52 mm.; VI, 1.26 (0.15 + 1.1) mm.; legs rather long; cornicles 0.75 mm. long, slightly swollen on distal half, blackish at tip, with three or four rows of closed reticulations; cauda long, conical, usually very slightly constricted near base.

In Utah this aphid has also been collected at Garden City, June 23; Holden, July 7; and Hurricane, July 11, all during 1925. Only at St George was it found in such numbers as to affect the plant noticeably.

Cotypes in the United States National Museum and in the collection of the writer.

---

#### CALLIDIUM PALLIDUM Van Dyke

Since this species was described (Pan-Pacif. Entom., Vol. 4, p. 111, 1928), from two male individuals, a series of eleven specimens consisting of four males and seven females belonging to Mr. H. C. Cain, has been submitted to me by Mr. Gorton Linsley. All of these were reared by Mr. Cain from branches of the redwood, *Sequoia sempervirens* Endl., taken at La Honda, San Mateo County, California, and emerged, indoors, about January 1, 1923. The males are exactly like the specimens previously studied, robust and rufotestaceous. The females are, however, entirely different, not especially robust and of a dark violet color, superficially resembling *antennatum* Newm. The species is thus shown to be the most remarkably dichromatic as well as dimorphic one that I know of among the Callidini. The distinctive features of the female when compared with the females of other blue or violet species, are: the brown pile of the forebody, the narrow prothorax, hardly more than three-fifths as broad as elytra and the very long elytra, an average of 12 mm. as compared with a total length of 16 mm. *Callidium sequoiarium* Fisch., described from the giant sequoia but also found on the coast redwood, is not only sexually unicolorous, but more greenish, more shining, with a proportionally broader prothorax and shorter elytra.—Edwin C. Van Dyke.